

**In the Claims**

The status of claims in the case is as follows:

1 1. [Currently amended] A collaboration space, comprising:

a<sup>3</sup>  
3 a place comprising a plurality of rooms linked by  
4 forward and reverse pointers, each said forward pointer  
including a readers field;

5 a member directory for said place identifying users  
6 authorized to enter said place; and

7 each said room comprising one or more pages, and for  
8 each said room said readers field being a members  
9 object for identifying members authorized to access  
10 said room and for each member a level of authorization.

1 2. [Original] The collaboration space of claim 1, said  
2 levels of authorization including manager, author, and  
3 reader.

1 3. [Currently amended] ~~The collaboration space of claim 1,~~

2 A collaboration space, comprising:

3 a place comprising a plurality of rooms linked by

4 pointers;

5 a member directory for said place identifying users

6 authorized to enter said place; and

7 each said room comprising one or more pages, and for

8 each said room a members object for identifying members

9 authorized to access said room and for each member a

10 level of authorization;

11 said rooms including a parent room and a child room, and

12 said pointers comprising forward and backward pointers for

13 enabling the security of each said room to be independently

14 managed.

1 4. [Original] The collaboration space of claim 3, each

2 said forward pointer further comprising a readers field,

3 said readers field including an access authority for each

4 reader authorized to enter said room.

1 5. [Original] The collaboration space of claim 3, each  
2 said forward pointer being secure pointer.

1 6. [Original] The collaboration space of claim 5, each  
2 said forward pointer carrying the same security as that of  
3 the subroom to which it points.

1 7. [Original] The collaboration space of claim 6, further  
2 comprising a display for presenting to a specific user  
3 viewing a parent room a listing of its subrooms, said  
4 listing including for said specific user only those subrooms  
5 for which a readers field in said forward pointer includes  
6 an entry authorizing access by said specific user.

1 8. [Currently amended] A database access control system,  
2 comprising:

3 an access control list for specifying users who can or  
4 cannot access said database;

5 for users authorized to access said database, said  
6 access control list further specifying access levels  
7 and roles determining the specific actions said users  
8 are authorized to perform, said roles including reader,  
9 author, and manager;

10 a form selectively including a form access list;

11 said database including one or more documents created  
12 from said form;

13 forward pointers linking said form to said documents  
14 and reverse pointers linking said documents back to  
15 said form;

16 said form access list identifying users authorized to  
17 read documents created from said form;

18 each said forward pointer to a document including a  
19 document access field selectively including a readers  
20 field and an authors field for controlling who can read  
21 or modify said document; users identified in any said  
22 form access list for said form from which said document  
23 was created being included in said readers field;

24 entries in said readers field granting authorization to  
25 an individual user equal to or less than the  
26 authorization for said individual user in said access  
27 control list; and

a<sup>3</sup> 28 entries in said authors field selectively granting  
29 authorization to a user authorized as an author in said  
30 access control list to edit a document which said  
31 author creates.

1 9. [Currently amended] A method for controlling access to  
2 rooms within a collaboration place, comprising the steps of:

3 maintaining for said collaboration place an access  
4 control list identifying those users authorized to  
5 enter said place;

6 providing forward and reverse pointers linking said  
7 rooms in a hierarchical structure within said place,  
8 said ~~pointers including~~ forward pointers having a  
9 readers field;

10 displaying a parent room to a specific user, said

11 parent room including a list of children rooms for  
12 which said readers fields on said forward pointers  
13 authorize said specific user access.

1 10. [Original] A method for creating a child room within a  
2 collaboration place data base, comprising the steps of:

3 providing for said data base an access control list  
4 identifying users authorized to access said data base;

5 providing for said child room a back pointer to a  
6 parent room; and

7 providing at said parent room for said child room a  
8 forward pointer from said parent room, said pointer  
9 including a readers access field listing users  
10 authorized to access said child room.

1 11. [Original] The method of claim 10, further comprising  
2 the steps of:

3 limiting reader access in said readers access field to

4           said child room for a specific user to no more than the  
5           access granted said specific user in said access  
6           control list.

12. [Original] The method of claim 11, further comprising  
the step of initially including in said readers access  
field for a child room created from a form users  
identified in a form access list identifying users  
authorized to read rooms created from said form.

13. [Currently amended] A program storage device readable  
by a machine, tangibly embodying a program of instructions  
executable by a machine to perform method steps for  
controlling access to rooms within a collaboration place,  
said method steps comprising:

maintaining for said collaboration place an access  
control list identifying those users authorized to  
enter said place;

providing forward and reverse pointers linking said  
rooms within said place, said ~~pointers including~~

11 forward pointers having a readers field; and  
12 displaying a parent room to a specific user, said  
13 parent room including a list of children rooms for  
14 which said readers fields on said forward pointers  
15 authorize said specific user access.

Q<sup>3</sup>  
1 14. [Currently amended] An article of manufacture  
2 comprising:

3 a computer useable medium having computer readable  
4 program code means embodied therein for controlling  
5 access to rooms within a collaboration place, the  
6 computer readable program means in said article of  
7 manufacture comprising:

8 computer readable program code means for causing a  
9 computer to effect maintaining for said collaboration  
10 place an access control list identifying those users  
11 authorized to enter said place;

12 computer readable program code means for causing a  
13 computer to effect providing forward and reverse

14 pointers linking said rooms in a hierarchical structure  
15 within said place, said ~~pointers including~~ forward  
16 pointers having a readers field; and

17 computer readable program code means for causing a  
18 computer to effect displaying a parent room to a  
19 specific user, said parent room including a list of  
20 children rooms for which said readers fields on said  
21 forward pointers authorize said specific user access.

1 15. [Currently amended] A computer program product or  
2 computer program element for controlling access to rooms  
3 within a collaboration place according to the steps of:

4 maintaining for said collaboration place an access  
5 control list identifying those users authorized to  
6 enter said place;

7 providing forward and reverse pointers linking said  
8 rooms in a double-linked list within said place, said  
9 ~~pointers including~~ forward pointers having a readers  
10 field;

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11 displaying a parent room to a specific user, said  
12 parent room including on said forward pointers a list  
13 of children rooms for which said readers fields  
14 authorize said specific user access.

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